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The Initiation of Change by Principals in Selected Elementary Schools in Northern Cook County

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DIMENSIONS OF CAUSALITY AND SUCCESS IN A HIGH SCHOOL PROGRAM FOR STUDENTS WITH SEVERE BEHAVIOR DISORDERS: A FIELD STUDY

by

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insights, perspectives, and humor repeatedly recalled a healthy balance of values.

With love and respect, the author therefore dedicates her pursuit of knowledge to Robert, Mary Louise, Joseph, Matthew, Anne and their selected companions in life.

VITA

The author, Georgia Mankowski, is the daughter of Louis Graham and Mary (Schlenger) Graham. She was born January 28, 1930, in Moline, Illinois, the second of six offspring.

Her elementary education was obtained in Chicago and Ottawa, Illinois parochial schools. Secondary education was completed at Loretto High School, Chicago Illinois. Entering Loyola University of Chicago in September of 1947 she received a Bachelor of Science in Psychology in June of 1951. Continuing her studies, certification in elementary education was accomplished and for four years she taught in District 94, Steger Illinois. While raising her children, Mrs. Mankowski completed a Masters of Arts in Clinical Psychology at Roosevelt University, Chicago, in 1970. Upon the death of her husband Mrs. Mankowski served internship as a School Psychologist in District 143, Midlothian, Illinois, completing certification requirements in 1972 and continued employment with the district. Since the summer of 1984 she has served as Chief Psychologist at PACE High School an alternative public educational program for high school students with severe behavioral and emotional disorders, under the administration of the ECHO Cooperative.

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CHAPTER I

INTRODUCTION

A man may well bring horse to the water, But
he cannot make him drink without he will.
(From John Heywood's Proverbs, 1546)

The heuristic power of attribution theory has produced a large body of research, and in the process, questions and methods have evolved with the concepts under investigation. These concepts are usually examined under experimental conditions which elicit processes of relatively brief duration. Lefcourt (1980) expresses a concern for reliability and ecological validity due to this focus in research. Field studies are proposed as a method that provides valuable information to supplement or support experimental contributions. Rotter (1975) discusses the misuse and limitations of measurement including inferences by the examiner as to the examinee's purpose, meaning, or nature. Ross (1977) has noted the ambiguity of attributional statements and Weiner (1979) has noted that the placement of a cause in terms of causal dimensions may vary greatly from person to person, as well as from situation to situation. He speaks of the locus of control (LOC) literature as "plagued by an inadequate analysis of causality (pg. 16)." In an

attempt to remedy this problem of interpretation, Russell (1982) has designed The Causal Dimension Scale, a measure to assess how the attributor perceives the causal attributions he or she has stated.

In addition to this interpretive concern, the effect of interaction with other variables on the predictive power of attributional concepts has theoretical and practical value. State of the field reviews note a behavioral interest rather than the traditional epistemological emphasis. Past focus on basic process research to the exclusion of applied aspects leads to a model of people's social perceptual processes that ignores the effect behavioral consequences may have on the ordinary persons attributions (Eiser, 1983; Harney & Harris, 1983). The implications for educational programs are considerable. (DeCharms, 1972; Dweck, & Repucci, 1973; Dweck, 1975; Bar-Tal, 1978; Weiner, 1979; Weiner, 1980; Dweck, 1986). The present study hopes to contribute to the understanding of the applications of attributional theory in general and dimensions of causal attributions in particular as behavioral predictors. Cognitive social psychologists take for granted that people make diagnostic inferences to explain why an event occurs but there has been little investigation of the functional significance this capacity serves for adaptive behavior.

The present study uses a population of subjects in a program for high school students whose academic achievement

is poor and whose behavior is maladaptive. The program seeks to encourage mastery over the environment by developing academic and social skills. Because this is a highly individualized program, the identification of prognostic variables is important. They can be used for entry and exit criteria, program design, curriculum development, goals and objectives of the Individualized Educational Program required by The Education for All Handicapped Children Act (P.L. 94-142) and other evaluative measures. In this setting a non-experimentally manipulated investigation can be conducted, although the entire program is actually a treatment system. The vitality of an instrument for data collection that minimizes examiner inferences can be tested. Even though the instrument used (The Causal Dimension Scale) is designed to stimulate self-probe in a real life achievement situation and examiner biases of inference are controlled some potential problems of interpretation remain. Subjects are still being asked to make attributions and whether they would spontaneously search for cause remains a question. Besides social deviance the sample of subjects has another common characteristic of underdeveloped language skills which may limit interpretation of the stimulus question. The use of a semantic differential scale also creates the possibility of a ranking bias that is a reflection of approval/disapproval attitude toward the subject regardless of factor content or an attempt to present ones self in a favorable manner.

Because the subjects for this study are not randomly chosen and have a common factor of social deviance characteristics of a specific population can be estimated and used to explore the specificity of attributions dependant on group memberships such as cultural or social. This study, under these conditions, is expected to contribute to attribution theory in general, the dimensions of causality in particular, and remediation components for a treatment program.

CHAPTER II

REVIEW OF RELATED LITERATURE

Perceptions of Cause and Behavior

Social learning theory attempts to integrate two significant trends in American psychology--the behavioral stimulus-response or reinforcement theories and cognitive, or field, theories. By doing so it attempts to deal with the complexity of human nature. On this thoery, an individual's interest in why something has or has not been a consequence of his or her behavior is assumed to be motivation. The search for understanding, in other words, is believed to stand with hedonism among the primary sources of motivation (Meyer, Folkes, & Weiner, 1976). Weiner and associates (Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971; Weiner, 1972, 1974) have suggested that an individual's beliefs about causes of success and failure may be of major importance in understanding achievement behavior. These beliefs mediating between perceptions of an achievement task and the final performance explain achievement behavior giving us a cognitive model of motivation. Attribution theory is an attempt to explain how the individual`s perception of cause affects his or her behavior.

Dimensions of Causality

Because the raw data of attribution investigation is phenomenological, the causes listed by individuals are myriad. In the interest of scientific investigation, these causes have been categorized into dimensions of causality. Bernard Weiner has proposed a taxonomy guided by F. Heider (1958) and distilled from the works of J. Rotter (1966), DeCharms (1968), Rosenbaum (1972) and Abramson, Seligman and Teasdale (1978). Weiner (1979) discriminates three dimensions of causality i.e. locus, stability, and controllability. There are a number of studies supporting this differential isolation of causes into the second-order concepts of dimensions (J. Meyer, 1978; Passer, 1977; Michela, Peplau, & Weeks, 1978, Weiner, and Kelley (1982)). J. Meyer's study (1978) is consistently cited because the procedure of factor analysis controlled for subject interpretation and yielded results supporting logical analysis. Weiner himself cautions that the three dimensions he proposed from logical analyses and which have been supported by techniques of factor analyses and multidimensional scaling are probably not exhaustive. (Weiner, 1979). As an example, he cites globality identified by Abramson, Seligman & Teasdale (1978) in their work on learned helplessness. This dimension captures stimulus generalization where causes would be perceived as task specific and, at the other end of the dimensional continuum,

as a general trait influencing performance. As second order concepts emerge from analysis, questions of dimensional independence are raised. Weiner further warns that the phenomenological nature of causal attributions means their relative position within a dimension is not invariant and toxonomic classifications must be qualified. This variability of attributions within and between individuals is currently a productive area of research (Dweck, 1986; Marsh, Smith & Barnes, 1983; Willig, Harnisch, Hill & Maehr, 1983; Castenell, 1983, Elliott & Dweck, 1985; Licht, Linden, Brown & Sexton, 1984).

Weiner's first dimensional classification is locus which includes causes perceived as internal or external to the individual. This dimension influences the psychological consequence of affective reaction. For example, internal ascriptions engender pride in success and shame in failure. Rotter (1966) originally proposed a one-dimensional classification of causality, i.e. internal or external and labeled this locus of control. Weiner feels the concept of control confounds locus and the two should be seperated. The second dimension, according to Weiner, is stability and locates causes on an invariant (stable) versus variant (unstable) continuum. Weiner strongly advocates this dimension as accounting for cognitive changes in expectancy following success or failure (Weiner, Nierenberg, and Goldstein, 1976). If the cause ascribed to success or

failure is perceived as stable, then the outcome expected for future events would be the same. Likewise, unstable causes would allow the expectation that outcomes can vary. Weiner found that internal/external ascriptions are not related to expectancies of success (Weiner et al, 1976) and quotes other studies (Fontaine, 1974; Meyer, 1978; Valle & Frieze, 1976). Controllability is the third dimension of Weiner and not popularly recognized in research because of its questionable independence. In the Michela, Peplau & Weeks (1978) study of lonliness, controllability emerged as non-orthogonal. This dimension refers to the perception of a cause as subject to volitional control by self or others and influences interpersonal evaluation. Failure due to uncontrollable causes, for instance, would more likely receive a non-punishing reaction.

Previously mentioned research of J. Meyer (1978, 1980); Passer (1978, 1978); and Michela, Peplau, and Weeks (1978); Bar-Tal & Darom, (1979), suggests that people do process information concerning causality in terms of the causal dimensions identified by Weiner. In other words, people actually do organize their thinking in terms of causal dimensions described by researchers and theorists. For example, how can an individual who attributes success (or failure) to ability, develop an anticipation of future success (or failure) unless ability is recognized as stable or unlikely to vary over time? A recent study by Wilson and

Palmer (1983) using two experimental situations on different samples replicated each other and found attribution clusters which reflected Weiner's locus and stability dimensions. However, second-order factor patterns indicated "naive psychologist" college students differentiated attributions into success and failure causal ascriptions, but did not differentiate these attributions dimensionally. These findings are in contrast with Meyer, (1978, 1980), Passer (1977, 1978), and Michela, Peplau & Weeks (1978) and attributed to methodological differences in investigation. In the Wilson and Palmer study, attributions were derived and categorized by subjects with no methodological constraints.

While Weiner's particular model has critics and problems such as the independence of dimensions remain unsolved, its intuitive plausibility encourages continued use and studies continue to report consistent findings. (Meyer, 1980; Forsyth & McMillan, 1981).

The Causal Dimension Scale

Traditionally, the researcher codes attributional statements into dimensions in spite of frequent calls for caution due to the subjectivity of attributor response and researcher interpretation (Ross, 1977: Bar-Tal, 1978; Wiener, 1979; Lefcourt, 1980; Graham and Long, 1986). The Causal Dimension Scale (Russell, 1982) is proposed to overcome this shortcoming of attribution research. Although the scale is brief, with only three items for each

dimensional subscale, Russell reports coefficient values of .867, .837, and .730 for internal consistency of subscales. He establishes construct validity by relating scores on his scale with Weiner's theoretical prediction of affective reactions to success and failure (Russell, 1980) but asks for further construct validation. By using this scale, the examiner makes no inferences as to the subject's dimensional perceptions of ascribed cause. The cause is treated as a stimulus and dimensional perceptions are reported by the subject. No other studies were found using subject generated dimensional information and these unique data were used to explore some relevant attributional facets and/or cross validate extant findings.

Relevant Issues

Issues were chosen for their possible contribution to the understanding and treatment of a particular population, the severely behavior disordered or socially deviant student. Continuing the education of these students is demanding, frustrating, and has important societal consequences. With increased knowledge of motivation and values, the understanding of behavior dynamics can contribute to effective schooling. Pursuing this goal directed a literature review to several specific areas. Because behavior change is a necessary condition for these students' academic success the effect of causal stability was selected for study. No matter what is offered in the curriculum, if

the goal offered is not of value to the student, cooperative behaviors are not likely nor is persistence towards goal. Therefore incentive value is included as an important variable. While the students' attributional perceptions are of high interest, their treatment is mostly determined, administered and evaluated by significant others whose attributions influence decisions about the students. These actor-observer differences are a popular research issue and a critical factor in the program under study. Again because the student's progress is so dependent on significant others, trust is selected as a relevant variable. Often cited as a contributing factor to deviant behavior are socio-cultural differences. Because this particular sample of students come from communities of varying affluence and are mostly Black, these cultural characteristics could not be ignored. The data from this field study also provides an opportunity to examine the relationship between type of deviant behavior and academic outcomes.

Stability - Expectancy Relationship

With the dimensional values obtained from Russell's scale, Weiner's theoretical preference for a stability ascription - achievement relationship rather than locus ascription - achievement can be examined. Valle and Frieze (1976) postulate this model: $P=f\{E + O[f(S)]\}$. Predictions of expectations (P) are a function of the initial expectancy (E) plus the degree to which outcomes (O) are attributed to stable causes (S).

Whether this expectancy of outcome is self-fulfilling depends, according to Weiner, on the stability ascribed to the cause. Based on this formula, the following predictions could be made. If a student expected an outcome, either failure or success, the probability of this outcome actually occurring depends on the student's belief that the attributed causes are stable or unchanging. It follows, then, that if the causes are believed to be unstable, conditions could change and expected outcome would not be as probable. In this study, the relationship of each dimension and achievement expectancy were examined. It is expected that the more stable a cause is percieved, the more probable the predicted outcome. Then the converse should be true that unexpected outcome, i.e. other than predicted, will be related to unstable attributions. Possible relationships would be (a) if success is expected and attributed to stable

causes, the probability of the predicted outcome is high; (b) if success is expected but attributed to unstable causes, the probability of predicted outcome will be lower, and conversely; (c) if failure is expected and attributed to stable causes, the probability of predicted outcome will be high; and (d) if failure is expected and attributed to unstable causes, the outcome may be different than expected and therefore the probability of actual failure outcome will be less than when ascribed to stable causes.

Student subjects used in this study have a history of academic failure and severe disorders of behavior that determined their eligibility for a very restrictive educational program. Curriculum, behavior management, discipline, therapy, and staff selection are all directed towards creating an environment that models, supports, and teaches response change. The assumption is that teaching skills and providing the opportunity to practice these skills successfully will encourage the student to broaden his or her repertoire of response choices.(Goldstein, Sprafkin, Gershaw & Klein 1980) As response choices increase, the student feels more competent and effort is sustained since expectancy of reward has changed (Dweck, 1975: De Charms, 1968). Students who perceive failure as lack of ability expect to repeat failure because ability is believed to be a stable and uncontrollable characteristic, whereas an effort characteristic is unstable and controllable (Weiner, 1979).

Effort is rewarded in the management system of this program and wins the support of staff, which is not surprising since it is perceived by evaluators as a controllable cause, where ability is perceived as non-volitional.

Reinforcement Value

The Valle and Frieze model does not include value of reinforcement, even though in social learning theory it is a major determinant of behavior. Rotter cites failure to treat reinforcement value as a separate variable in making predictions as "the most frequent conceptual problem." (1975, p. 59) "In its most basic form, the general formula for behavior is that potential for a behavior to occur in any specific psychological situation is a function of the expectancy that the behavior will lead to a certain reinforcement in that situation and the value of that reinforcement (Rotter, 1975)." The program used in this study is offered by the local high school district as an opportunity for students to continue their education in the expectation that this is a desired goal. Because the program site is geographically removed from the feeder campus schools, involvement in the mainstream of education is precluded. This isolation is viewed as undesirable by the students and a condition which the students wish to remove by returning to their campus school of residence. These two factors, i.e. a high school diploma and mainstreaming, are

considered valued reinforcements for appropriate behavior and will be examined as motivators.

Actor-Observer Differences

Jones and Nisbett (1972) theorize there are differences in the dimensional perception of cause depending on whether the perceiver is self reporting or observing another. These researchers' analyses of behavior were influenced by ideas presented by Heider (1958). "It seems that behavior in particular has such salient properties it tends to engulf the total field rather than be confined to its proper position as local stimulus whose interpretation requires the additional data of a surrounding field, the situation in social perception." (p.54). "The person tends to attribute his own reactions to the object world, and those actions of another, when they differ from his own, to personal characteristics in O (other)" (p. 157). Jones and Nisbett argue that actors and observers frequently possess different background data regarding an action and therefore evaluate its significance from differing perspectives. They hypothesize that actors will attribute causality or responsibility for their behavior to situational influences (externality), whereas observers will attribute causality for the same behavior to dispositions possessed by the actors (internality). Because actors know more about their behavior and experiences than observers they are influenced by the recollection that their behavior has shown variance in the

past and are likely to attribute unstable causes whereas the observers attributions would have an unchanging quality due to the presumed stable personality dispositions.

Harvey, Arkin, Gleason, and Johnston (1974) found observers were sensitive to contextual conditions of an actor's behavior and outcome of an action was a determining factor in attributions. Results of the study by Harvey et al. showed an inverse relationship between the attribution of self responsibility for an action and negative effect of the action. Actors attributed less responsibility to themselves the more negative the effect of their action. For the same action effect a positive relationship existed for observors attributions to the actor. The more negative the effect, the more responsibility is ascribed to the actor. The authors argued that these results reflected the actor's need to maintain self esteem and the observer's need to control the actor's negative behavior which would be more difficult to accomplish if behavior was externally caused.

Evidence was found by Gould and Sigall (1977) that empathy influences the convergence of observer's and actors attributional perspectives. With an empathic set, observers attribute the target persons' success to dispositional causes and failure to situational causes which is the same pattern shown by actors in earlier research mentioned. Gould and Sigall (1977) note the importance of the interaction of attributers cognitive set and the nature or valence of

outcome in affecting how actors and observors diverge or converge in their causal attributions.

A comprehensive review of divergent perspective resarch was done by M. Zuckerman (1979) in his review of attributional research. Emerging from this review are the limitations of comparing research results from hypothetical and participant situations. A need is stated for sampling of real situations as having stronger potential for ecological generalizability and the study being discussed in this paper is such an opportunity. Monson and Snyder (1977) suggest one divergent perspective hypothesis qualification that has particular relevance considering the fact that the student subjects in this present study have been "placed" in the school program and, almost without exception, object to this action. Monson and Snyder's, evidence suggests that when a behavior has been performed in a situation chosen by the actor, the actor will make more dispositional attributions than will an observer, and conversely, the actor will make more situational attributions if in a situation not chosen by the actor.

Social Deviance

A. Trust

In the day to day operation of a program such as the one being used for this field study, many students appear to externally project responsibility for behaviors requiring

intervention or disciplinary action. Rotter (1966) characterized this group as defensive externals whose general expectancy would be an internally ascribed control, but who avoid internal ascriptions for failure as an ego defensive tactic. This group, however, would be expected to achieve mastery over the environment because of its motivation and ambition. A point-level system of management used in the field study high school establishes the criterion of success. Because this method of measurement is implemented by the authority figures (staff), it would be reasonable to expect distrust of the system and persons in control of this system as an ego defense for failure. Two straightforward questions about trust were answered by the students in this study and correlated with success. Basing a prediction on the verbalized, external ascription of blame popular in this particular program, an hypothesis of externality could be advanced. A study of Koeske and Koeske (1975) finds just the opposite, that is, internal ascription, while "conformant" students showed less internality. In a situation perceived as under the control of powerful authority, deviant behavior is explained as an effort at establishing identity and control, and therefore, has an internal dimension.

Socio-cultural Differences. The Koeske and Koeske (1975) subjects were high school students rated by teachers as "deviant." The extent to which these findings can be generalized is limited by the type of subject. Using

subjects conceived as deviant in the societal context of deviance (e.g. in trouble with the law), would address the confidence with which generalizations can be made. Subjects used for the study being reported here meet this criterion. The courts, administrative review, or mental health diagnosticians, have judged their behavior to be significantly deviant from the norm.

The tendencies to form causal attributions are learned and evidence from some studies suggests racial and social class differences. Coleman, Campbell, Hobson, McPartland, Mood, Wienfeld, and York (1966), and Friend and Neale (1972) are mentioned in the Bar-Tal (1978) article. Bar-Tal cites Friend & Neale (1972) as suggesting, for instance, that Blacks do not typically make effort attributions and do not perceive the covariation between effort and outcome. A recent cross-cultural study by Willig, Harnisch, Hill & Maehr (1983) reflects some widespread notions based on earlier research. The results of their study did not find the lower self concept for Black students assumed to be a consequence of global negative social reinforcement. The proposed explanation of this finding was in agreement with Banks, Stitt, Curtis & McQuater (1977) who showed that Black children tend to disregard negative feedback from White sources because it is not perceived by the children as objective. Motivation variables relevant to academic success for these Black subjects appear to be

incentive value and perceived personal utility. Academic achievement is not viewed as an accomplishment in itself. The Willig et al study also did not find that Black children have a more external locus of control and attribute achievement outcomes to luck as Friend and Neale (1972) and Murray and Mednick (1975) found. These apparent contradictions were explained by Willig et al (1983) as due to methodological differences. Willing et al (1983) did find that external ascriptions were commonly used by Black children who are experiencing academic failure and/or are from families that appear to be upwardly bound on the SES scale as Shaw and Uhl (1971) found. Because students in the program under study, regardless of ethnicity, come from communities with widely varying socio-economic characteristics, median income for the community of residence will be considered as a possible differentiating cultural factor, rather than race.

Dimensional Characteristics. In recent years therapeutic programs for aggressive, oppositional, or delinquent adolescents have adopted procedures using behavior modification techniques advocated by B.F. Skinner (1968). The effectiveness of such intervention has not been firmly established by research (Turkat and Feuerstein, 1978). Braukmann and Fixsen (1976) call attention to the evidence that the more effective behavior modification programs typically include (1) a teaching component designed to add

the desired behavior to the adolescents repertoire, (2) an incentive component to motivate the youngster, and (3) the actual delivery of reinforcement contingent upon performance. A recent study by Redner, Sneelman, and Davidson (1983) supports the effectiveness of behavior modification if individualized by differential prescription according to subject needs, adding a fourth component to the three identified by Braukmann and Fixsen.

The program containing the subjects for this present study uses all four of these components. The teaching component is Structured Learning Training (Goldstin et al, 1980;). This program develops social skills in a course required each semester through modeling, role playing, performance feedback and transfer training. The main incentive for students to change behavior is believed to be removal of their isolation from peers by returning to the mainstream of education. The students earn points each class period by virture of demonstrating cooperative behavior expected of all and targeted individually prescriptive behaviors. The percentage accumulation of these points and maintenence over a nine week period determines level of performance. There are four stages with the criterion of accomplishment becoming more stringent at each level. This method provides objectivity to the determination of success and immediate ongoing feedback for reinforcement. With the maintenance of Level Four behaviors for nine weeks, a student

is eligible for recommendation to a lesser restrictive educational program. Once a week each student's program is reviewed in the class group and once a month by the treatment team with the purpose of adjusting goals. This on-going review provides the means for individualizing according to student needs.

In the present study, the dependent variable of success is determined by this level system of measurement. It would include students who have advanced in the level system, reintegrated to a lesser restrictive campus program, or graduated. Because these level evaluations are made each quarter, and the duration of this study is one semester (2 quarters), the "successful" student would have to progress two levels, be reintegrated to home school, or graduated.

Historically, the success rate for students with severe behavior disorders is not high (Davidson, W.S., Seidman, E., 1974). In the program used for this field study, an average of 10 to 12 students out of 145 enrolled earn graduation or return to a less restrictive program each semester, with 10 to 12 more earning maximum level advancements. Of the 83 subjects used in this study, only 13 or 15.6% achieved the success criteria of graduation, return to campus school or level advancement. One explanation of these small positive results is an obstinant resistance on the part of the student that would suggest internal controls found by Koeske and Koeske (1975).

The above contradictory proposals and evidence might be reconciled if the following were investigated. Does this population of disordered students ascribe cause internally or externally in general? When provided remediation opportunity, is there a dimensional difference between the student who complies with the system, there by earning "success", and the student who "fails" by persisting in resistance? Internality in general is theoretically expected with the conforming (successful) student less internal than the non-compliant (failure) student. It is reasonable to expect an ascription of volitional control since the student appears to choose non- conformity. One criterion for the severely behavior disordered label is chronicity of social deviance, and this history encourages the student to expect stability of cause.

In summary, this study uses subjects whose measured characteristics are relevant to the area of investigation, i.e. dimensions of causality, but are not manipulated or inferred by the investigator. The data reflects ecological conditions longitudinally because the situation within which information was collected was not contrived and existed over a 16-week period. None of the research questions are novel, but few have been investigated within a field study, (Wright et al. 1980: Koeske and Koeske, 1975), and Russell's (1980, 1982) study was the only one found to use subject generated dimensions.

Research questions which this study attempts to answer are:

1. Predictive Dimensional Profile

   Is there a profile of the dimensions of causality which effectively discriminates between successful and unsuccessful students? It is expected tht there will be, and the dimensional differences identified in this field study will be examined theoretically.

2. Causal Stability and Achievement Expectancy Relationship

   Will the causal dimension of stabiity be less for students whose observed outcome differs from predicted outcome? This causal stability-achievement expectancy relationship is predicted theorectically by Weiner. It is hypothesized that when observed outcomes are different than expected, causal attributions would be unstable.

3. Relationship of Motivation and Achievement

   Is motivation, as operationally defined in this study, an intervening variable in the achievement of success? It is expected that a positive relationship will be found between: a) success and motivation to be mainstreamed back to original campus school (Motivation I): b) success and the value of high school diploma (Motivation II): c) the incentive value of these two motivation indicators will increase the predictive utility of a dimensional profile.

4. Actor-Observer Dimensional Differences

   Are there actor-observer dimensional differences?

According to the divergent perspective hypothesis differences are expected. It is specifically predicted a) that the causal dimension of locus will be attributed externally by actors while observers perceive cause as internally located, b) actors will attribute cause as less stable than will observors, c) causes of outcome will be differentially ascribed for success and failure by actors and observers. Specifically causes of negative outcome (achievement failure) will be ascribed as more dispositionally located by observers than actors who will ascribe situational attributions.

5. Relationship of Trust in Powerful Other and Achievement

Is there a relationship between trust and student achievement when the determination of achievement success is made by powerful others? A positive relationship is expected.

6. Socio-economic Status Students Dimensional Perceptions and Achievement Outcome

Do the dimensional perceptions of cause differ according to socio-economic status as defined in this study by median income for students' town of residence? It is predicted a) that there will be positive correlations between socio-economic background and dimensional ascriptions and b) positive relationship between academic outcome and median income.

7. The LOCUS Dimensional Characteristic of Causality for

Socially Deviant Students

Do socially deviant students ascribe their failure and success to internal or external causes? It is predicted that they will be more internally attributed. Because internality precludes situational ascriptions and implies personal responsibility, causes should be attributed as controllable and the students past history of non-conformity would indicate stability of cause.

8. Type of Deviant Behavior and Achievement Outcome

Is the type of deviant behavior demonstrated by the student related to success or failure in the program under study? It is predicted there will be a positive correlation.

These eight questions are ordered following the literature review sequence and are specifically asked to investigate three main areas of interest in this study:

1) The Predictive utility of attributional dimensions is explored with research question #1, a dimensional profile that discriminates successful/non successful achievers and question #5 which focus on the intervening variable of incentive motivation.

2) Cross validation of some extant attributional research findings by using dimensional perceptions generated by the subject rather than inferred by the researcher is attempted with questions #2, 6, and 7. These questions respectively apply to Weiner's postulated stability -

achievement expectancy relationship, actor-observor differences in dimensional perception, and differences by socio-economic level.

3) Dimensional and other relevant variable characteristics of a particular population of subjects, ie, socially deviant, are examined with information from all eight questions.

CHAPTER III

METHOD

Subjects

Subjects are high school age students that had performed acts in serious violation of the district disciplinary code or displayed a history of behaviors requiring interventions that were not available in a regular or less restrictive special educational program. These behaviors cover a range from chronic truancy to life threatening or gang related activity. The program under study was offered by the administrative district as an alternative so that educational goals could be pursued. The student's teachers, and teaching assistants participated in the study by rating their students and thus also function as subjects for dimensional measures. One third of the subjects have not been formally identified as having special needs by a diagnostic evaluation, so are in classes taught by teachers trained for regular education and this portion of the program is considered a short term accommodation or diagnostic placement. If the student in this regular education program component does not progress at a maximal rate through the behavior management system and earn recommendation for return

to his/her campus school, a comprehensive case study is recommended to determine special needs. The same behavioral management system applies to both regular and special education students, but non-instructional services differ. Examples of services not available to regular education students are: smaller class size, individualized instructional methods, and therapeutic counseling.

Students differentially diagnosed as emotionally disturbed rather than behaviorally disordered were not included in the study. Also excluded were students who met the (American Association on Mental Deficiency) criteria for retardation.

The students come from 15 midwest suburban communities where median income varies from $13,445 to $29,214. Seventy-seven percent of the student population is male, twenty-three percent female, seventy-six percent Black, twenty-two percent White, and three percent Oriental or Hispanic. The mean I.Q. is 87.2 with a 63-117 range and SD=15. At least 40% of the students are known to have been or continue to be, under the supervision of the court system for violations of the law committed in the community or school.

Certification for teaching students with behavior disorders is required of all professional instructional staff with the exception of three teaching positions in the regular education component. The professional staff is 87% White,

while 96% of the para-professionals are Black.

Site

The program under study is housed in a 30 year old former parochial high school building located in a suburb of a large midwestern city. The building is in excellent condition with appropriate facilities for the provision of required curriculum. Priority is given to academic requirements and all electives are in vocational areas. This site is geographically removed from any feeder school by at least three miles. Enrollment reached 155 during the semester of this study and average daily attendance is 79%. In compliance with 23 Illinois Administrative Code 226 and 122 Illinois Revised Statutes, Article 14, no class size exceeds 12, and each has a teaching assistant in addition to the instructor. Ten of the 47 staff members are non-instructional, acting as intervention/treatment resources persons. These 10 include a dean, with 2 assistants who are responsible for all disciplinary consequences, 2 psychologists, one social worker and one counselor each of whom are direct therapeutic treatment resources. One teacher and two assistants supervise in-school suspension (a disciplinary consequence). A third psychologist acts as case manager for all special education students, disgnosticion, consultant and liaison for feeder schools. All staff are employed by an educational cooperative the director of which is chief administrator and implements through a building

principal with two assistants, one for curriculum and another for direct supervision.

All students in this program are required to include in their schedule one class each semester which is intended to be a group therapeutic intervention experience (EEP). The curriculum for this course is largely didactic using a structured learning approach to teaching prosocial skills (Goldstein, Sprafkin, Gershaw & Klein, 1980). Attributions, trust and motivation are ordinary topics in this course of study and their treatment yielded the raw data for these variables.

Study Design

This study samples attributional perceptions of achievement. During the second week of the first academic semester of a school year, student perceptions were assessed using the causal Dimension Scale (CDS) (Russell, 1982) and two questionnaires designed by the investigator to measure trust (TM) and motivation (MM). At this same time, teachers and assistants perceptions of the students achievement courses were collected using the Causal Dimension Scale. All respondents were asked to state an expected end of semester achievement outcome of success or failure (EOUTC).

Sixteen weeks later, at the end of the semester, the students' actual achievement outcome was assessed. Whether the student had been successful or failed was determined by a

team consisting of teacher, assistant, counselor, dean and administrator using grades and behavior summaries. The objectivity of behavior evaluation was maximized by using a daily record of points earned by the student. All demographic data were collected from school registration records except for community of residence median income which was obtained from the United States Census Bureau.

Informed consent was not needed for this study because all data existed or were generated as an ordinary and universal function of the curriculum. All data were coded to protect confidentiality. The study was initiated with 83 subjects, but because of the attrition rate and consequent missing data, most results were calculated on the 70 original subjects who remained in the program.

Measures

Characteristics of the successfully and non-successfully achieving student were assessed in terms of: 1) demographic information 2) achievement outcome of success or failure expected by subject, teacher, and assistant, 3) dimensional perceptions of the cause of expected success or failure outcome, 4) trust, 5) motivation 6) actual observed achievement of success or failure.

Demographic Information

Variables commonly used for investigation of achievement diffferences and of particular relevance to this study were selected and data collected by the investigator

from student files, These included sex, intellectual ability, town of residence, and reason for referral to the program under study. Intellectual ability was determined by the report of a documented objective estimate with a mean of 100 and and standard deviation of 15 or 16. This information was missing for 23 subjects so the statistics obtained are questionable as representative. Socio- economic status was judged by median income level of the students residential town and was obtained from the Bureau of Census Information. This factor is the indicator, to the exclusion of other usual SES variables. The communities differ more from each other by race, tax base and occupational levels, than they do within each area. This homogeneity within and heterogenity between communiites, in addition to the questionable validity of personal information supplied by families, determined selection of the SES variable.

Admission into the program is preceded by a formal process to determine appropriateness of placement and ensure nonviolation of individual rights. From the records of this process the investigator coded descriptions of unacceptable behavior that warranted referral to the program under study according to the parent district Discipline Code. This grouping yielded four categories identified as Life Threatening, Gross Misconduct, Misconduct, and Gang Related. The most serious violation determined group inclusion. For instance, if a student was demonstrating gang related

activities and had a weapon, this was coded as Life Threatening rather than Gang Related. In the same manner, if the student with a hisotry of non-compliance or truancy had been in a fight. The reason for referral would be Gross Misconduct rather than Misconduct.

Expected Achievement Outcome

This expectation was reported by each student the second week into the semester while participating in a class exercise on Goal Setting. The survey was conducted by the instructor for each homeroom group meeting for the group therapeutic experience (EEP) and was a required assignment. The survey began by describing two end of semester outcomes, one successful and one not. This structuring forces the respondant into an either-or choice. The student indicated which described his expectation by circling the choice. Instructor and assistant completed this same survey for each homeroom student independent of each other and were instructed not to do this with the student or share opinions. Three values were obtained with this part of the survey:

1. End of semester achievement outcome anticipated by student (SOUTC).
2. End of semester achievement outcome for student anticipated by teacher (TOUTC).
3. End of semester achievement outcome for student anticipated by assistant.(AOUTC)

Dimensions of Causality

The aforementioned in class survey assignment, described above, included the instrument for assessment of causal dimensions by self report.(See Appendix A) This scale (CDS) was specifically designed to control examiner inferences as to perceptions of the reporter (Russell 1982). The instrument uses a semantic differential technique along a scale of nine points (Osgood, Suci, & Tannenbaum, 1957). There are nine questions which yield scores for the three dimensions of causality reported by Weiner (1979), locus, stability and controllability. Three questions contribute to each dimension value yielding a score within a possible range of 3-27. Scores at the low end of range would indicate externality, instability and uncontrollability of cause while high scores would reflect the opposite. Because three groups scored this scale on the factors, nine dimensional values were obtained. Although the language level of the instrument generally seemed appropriate for the subjects three items were altered for clarity. From item one "reflects yourself", was changed to "about yourself": item 3 "permanent" was changed to "we'll always be" and "temporary" to "just for now": item six "variable over time" became "different at times" and "stable over time" was "always the same".

After the students indicated expected achievement outcome they were asked to give a reason for their anticipated success or failure. The next step was to

complete the CDS according to the respondents opinion or impression of the cause. Instructors who presented and supervised this survey reported no problems of administration or comprehension. Teachers & assistants also stated reason for achievement or lack of achievement for ther EEP group and completed the same dimensional scale (CDS).

The cause (reason) of achievement success or failure was only a stimulus for dimensional perceptions and not used as data for this study.

This "survey" instrument including the Causal Dimension Scale generated the following data."

1. Locus of causality perceived by student (SLOCUS)
2. Locus of causality perceived by teacher (TLOCUS)
3. Locus of causality perceived by assistant (ALOCUS)
4. Stability of causality percieved by student (SSTAB)
5. Stability of causality perceived by teacher (TSTAB)
6. Stability of causality perceived by assistant (ASTAB)
7. Controllability of causality perceived by student (SCON)
8. Controllability of causality perceived by teacher (TCON)
9. Controllability of causality perceived by assistant (ACON)

Trust

Student progress is measured by points earned each period of the school day. Number of points earned is

determined and recorded by the staff. Student confidence in this means of evaluation was assessed in the survey by their response to two questions indicated on a three position Likert scale. (See Appendix) The first question asked if the point-level system of evaluation was thought by the student to be a fair way of deciding success. (Trust I) Whether the student thought staff would be fair in this progress decision was the second question. (Trust II) Students indicated No, Not Sure or Yes.

Motivation = Incentive Value

During the same class assignment or Goal Setting the student was asked how important return to campus school was (Motivation I) and a high school diploma (Motivation II). Possible answers were Not At All, Somewhat, Very Important. (See Appendix)

Actual Observed Achievement Outcome Of Success Or Failure.

Two kinds of outcome information were used in this study. The first, described earlier as expected achievement outcome, is the prediction generated by subjects and serves as an independent variable. The second outcome described here is the dependent variable.

At the end of the semester the students actual observed outcome was recorded. This evaluation is routinely done by the students treatment term (teacher, assistant, counselor and administrator). To meet the success criteria specified for this study and operationally described in the

beginning of the semester survey when expected outcome was predicted, the student had to have achieved and maintained sufficent points to progress two levels in the management system or earned the recommendation for return to campus school. Upward progression of two levels was not a necessary condition for return to campus school since some students had been on a level at the beginning of the semester that only required one more upward movement to achieve criteria and therefor would not meet the two level upward movement criterion but were obviously successful. Also considered and counted as successful were those students who had earned credit required for graduation and elected to do so but who may not have advanced two levels. This second outcome information, which is the actual observed achievement of the student, was coded into two groups success or failure and is the dependent variable.

Statistical Analyses

All statistical analyses were performed using the SAS statistical package and executed on an IBM mainframe computer. Multiple discriminant analysis was utilized to derive linear combinations of dimensions values that characterized success and failure groups. A stepwise analysis using the backward method for selecting variables with the most discriminating power (significance level to

stay = 0.15) was carried out. Multivariate analyses of variance with repeated measures were performed to measure dimensional differences of success and failure groups. Student t-test procedures were computed to determine dimensional comparability of the group whose anticipated achievement outcome was congruent with observed outcome and the groups whose outcomes were not congruent. Crosstab procedures produced tables of value distribution for anticipated achievement outcome, reason for referral, trust, motivation, socio-economic status, sex and race variables. The predictive power of these variables for actual observed achievement outcome was estimated using Pearsons R., McNemars test of correlated proportion, Lambda Asymmetric (R:C) and Stuart's Tau-C depending on the type of raw-data.

CHAPTER IV

RESULTS

The eight research questions investigated in this study fall into three main areas as mentioned at the end of Chapter II. Following this organization results will be reported in three sections. The first section covers the findings for the predictive utility of attibutional dimensions. Discriminant analysis is used to develop a predictive profile (Research Question #1) and the effect of a motivation variable on the accuracy of this prediction by dimensions is included (Research Question #3). Section two reports results for cross validation attempts of earlier research. A Causal stability - achievement expectancy relationship is investigated using t-tests, actor-observor dimensional differences are reported by analyses of variance and correlation results are used to investigate the relationship between dimensions of causality and socio-economic status of median income. Results in section two apply to Research Questions #2, 4, & 6, respectively.

The third section reports findings of efforts to establish dimensional characteristics of the particular population of subjects under study ie, socially deviant

(Research Question #7) with mean scores and standard deviations. Included in this section are correlational results for research questions #5 and 8, indicating the relationship of trust and type of deviant behavior with academic achievement for this population of students.

Section I: Predictive Utility of Attributional Dimensions of Causality

Before reporting the results of analysis to establish an effectively predictive profile, the dimensional predictor variables relationship with the dependent variable of observed achievement outcome (success or failure) will be examined. Descriptive statistics are displayed in Table 1. Table 1 reveals that the dimensional mean scores are all higher for the successfully achieving group than for the failure group with the exception of locus perceived by teacher (ALOCUS). These higher scores place cause at the upper end of the dimensional continuums indicating internality, stability and controllability versus externality, instability, and uncontrollability.

Factorial analysis of variance with repeated measures was utilized to determine main effects of observed achievement outcome as well as the interactive effect of dimensional characteristics by person reporting the characteristics (perceiver). Table 2 displays the ANOVA results. Significant main effects between the success and

Table 1

Dimensional Scores

Achievement Group

Variable	Failure $\bar{X}$	Failure SD	Success $\bar{X}$	Success SD	Marginals
Student Locus (SLOCUS)	18.56	(6.54)	23.27	(4.17)	19.30
Teacher Locus (TLOCUS)	22.10	(4.53)	24.18	(3.92)	22.43
Assistant Locus (ALOCUS)	22.42	(3.31)	22.18	(3.43)	22.38
Marginals	21.03		23.21		21.37
Student Stability (SSTAB)	14.83	(7.08)	19.91	(6.24)	15.63
Teacher Stability (TSTAB)	13.31	(4.15)	15.82	(3.63)	13.70
Assistant Stability (ASTAB)	14.03	(4.54)	18.18	(3.22)	14.68
Marginals	14.06		17.97		14.67
Student Controllability (SCON)	18.771	(5.80)	23.27	(4.17)	19.46
Teacher Controllability (TCON)	20.77	(5.18)	24.36	(4.54)	21.32
Assistant Controllability (ACON)	21.87	(4.56)	23.09	(3.53)	22.06
Marginals	20.47		23.57		20.95

N = 70
Range = 3 - 27 with higher scores indicating internality, stability and controllability

TABLE 2
Analyses of Variance

Achievement Outcome (Success or Failure) by Locus of Cause and Perceivor (Student, Teacher Assistant)

Source	SS	DF	MS	F	Probability
Mean	54438.407	1	54438.407	2190.80	0.000
Achievement Outcome	132.654	1	132.654	5.34	0.023
Error	1689.707	68	24.848		
Locus	93.713	2	46.856	2.08	0.129
Locus by Outcome	113.980	2	56.990	2.53	0.083
Error	3066.086	136	22.544		

Achievement Outcome by Stability of Cause and Perceivor

Source	SS	DF	MS	F	Probability
Mean	28528.476	1	28528.476	829.13	0.000
Achievement Outcome	425.923	1	425.923	12.38	0.000
Error	2339.738	68	34.407		
Stability	146.724	2	73.362	2.94	0.056
Stability by Outcome	31.277	2	15.638	0.63	0.535
Error	3391.189	136	24.935		

Achievement Outcome by Controllability of Cause and Perceivor

Source	SS	DF	MS	F	Probability
Mean	34094.022	1	54094.022	1933.74	0.000
Achievement Outcome	269.571	1	269.571	9.64	0.002
Error	1930.193	69	27.973		
Controllability	56.082	2	28.041	1.15	0.320
Controllability by Outcome	53.378	2	26.689	1.09	0.338
Error	3371.842	138	24.433		

failure groups were found for all three dimensional characteristics. The cause of achievement was ascribed as more internally than externally located for successfully achieving students when contrasted with the non-successful group, F (1,68) = 5.34, $p < .05$. Cause of achievement was also ascribed as more stable over time for the successful group than it was for the group of students that failed to achieve, F (1.68) = 12.38, $p < .01$. In a similar direction more volitional control over cause was attributed for successful students than for non-successful F (1, 69) = 9.64, $p < .01$. These results indicate there are significant dimensional differences for the two achievement groups (successful and unsuccessful).

Because the ANOVA raw data consists of three dimensional scale values reported by three different groups (student, teacher and assistant) the effects of repeated measures is included in the analysis. No dimensional differences with p. $\leq .05$ were found between the three groups reporting. This result will be discussed in Part 2 of this Chapter in regards to Actor-Observor differences (Research Question #6) No interaction effects with p. $\leq .05$ were found between the group reporting dimensions of causality and achievement outcome of success or failure.

These significant main effects with no interactive complications were encouraging and the following results establish their predictive utility in combination with

incentive motivation. Discriminant analysis of the subjects nine dimensional perceptions of causality designated profiles for the two types of achievement outcome, successful and non-successful students, that correctly classified 77.14%. A tau error statistic of .542 indicates classification based on the nine dimensional discriminating variables made 54% fewer errors than expected by random assignment. Of the 70 subjects, 35 errors would be expected by chance since there are two groups; however only 16 were misclassified.

Dimensions ascribed to the causes of anticipated academic achievement (success or failure) reported by the subjects in the Student Survey yielded values for nine variables: students perception of causal locus, (SLOCUS), stability (SCON) and controllability (SCON), teachers perceptions (TLOCUS, TSTAB, TCON) and assistants (ALOCUS, ASTAB, ACON). Discriminant analysis yielded functions for successful and non-successful group assignments and are presented in Table 3. Putting these coefficients into the discriminant formula locates the success and failure groups centroid locations. The most typical positions were 1.164 and -.001 for success and failure groups respectively.

Table 4 summarizes the accuracy of assignment using the derived discriminant functions. Of the those subjects whose achievement status was actual failure, 76.27% were so classified while 81.82 % of successful students were correctly identified.

Table 3

Nine Variable Classification Function Coefficients

(Fishers' Linear Discriminant Functions)

Variable	Outcome Predicted	
	Failure	Success
(constant)	-0.08390370	-0.92911086
Student locus (SLOCUS)	0.10195052	0.38182972
Student stability(SSTAB)	-0.05389112	0.19001508
Student controllability (SCON)	-0.12680243	0.40526902
Teacher locus (TLOCUS)	-0.32582983	-0.27416646
Teacher stability (TSTAB)		
Teacher controllability (TCON)	-0.00427783	0.28050902
Assistant locus (ALOCUS)	0.33463568	0.81263181
Assistant stability (ASTAB)	-0.27820312	-1.38467086
Assistant controllability (ACON)	-0.61967919	1.01186092
	-0.00300459	0.53462846

Table 4

Classification Summary Using 9 Variables

Predicted Outcome Group Membership

Observed Outcome	Failure	Success	Total
Failure	45	14	59N
	76.27	23.73	100.00%
Success	2	9	11N
	18.18	81.82	100.00%
Totals	47	23	70N
Percent	67.14	32.86	100.00%

Cases correctly classified = 77.14%

Applying stepwise elimination procedure by using the backward method on the nine variable equation, produced an optimal set of three discriminating variables. Table 5 shows these three as students' perception of causal controllability (SCON), teacher's perception of causal controllability (TCON) and assistant's perception of stability (ASTAB), accounting for 19% (eta, average squared cannonical correlation) of the variation in the discriminant function. Table 5 also shows that the nine variable equation accounts for 24% of the variance.

Selection of the successfully achieving and unsuccessfully achieving groups using the three variable linear discriminant function (Table 6) somewhat decreased the utility of the dimensional profile as a predictor. Table 7 classification summary shows 19 of 71 cases were misclassified which yields a tau error statistic of .436. Predictability over chance was increased only 43.6% as compared with the nine variable .54%.

The two variables defined in this study as indicators of incentive value (Mot I and Mot II) were separately included in the discriminant analyses on the assumption that the value of a reinforcement is positively related to the achievement of this goal and therefore would be a predictor variable. Including the importance of return to campus school (Mot I) created a 10 variable equation with coefficient values displayed in Table 8. The addition of

Table 5

Backward Elimination Summary

Step	Variables Deleted	Partial Beta^2	F Statistic	F Probability	Average Squared Canonical Correlation (ETA)	Association Probability
0.					0.240963	0.0418
1.	TLOCUS	0.0001	0.004	0.9478	0.240908	0.0243
2.	SSTAB	0.0043	0.267	0.6075	0.237591	0.0146
3.	TSTAB	0.0094	0.586	0.4469	0.230385	0.0093
4.	SLOCUS	0.0129	0.825	0.3672	0.220307	0.0061
5.	ACON	0.0226	1.477	0.2287	0.202314	0.0049
6.	ALOCUS	0.0127	0.837	0.3635	0.192037	0.0027
	Variables Remaining					
7.	SCON	0.0612	4.305	0.0419		
	TCON	0.0378	2.595	0.1120		
	ASTAB	0.0570	3.991	0.0499		

Table 6

Three Variable Classification Function Coefficients

(Fisher's Linear Discriminant Function)

Variable	Outcome Predicted	
	Failure	Success
Constant	-0.014139	-0.561721
SCON	-0.107490	0.699716
TCON	-0.120265	0.7877136
ASTAB	-0.084568	0.446169

Table 7

Classification Summary Using Three Variables

	Predicted Outcome Group Membership		
Observed Outcome	Failure	Success	Total
Failure	44	16	60
	73.33	26.67	100.00%
Success	3	8	11
	27.27	72.73	100.00%
Totals	47	24	71
Percent	66.20	33.80	100.00%

Cases correctly classified = 73.2%

Table 8

Ten Variable Classification Function Coefficients

(Fisher's Linear Discriminant Function)

Variable	Outcome Predicted	
	Failure	Success
Constant	-0.087367	-0.969860
SLOCUS	0.108354	0.359846
SSTAB	-0.042544	0.151094
SCON	-0.142939	0.460618
TLOCUS	-0.380629	-0.086208
TSTAB	-0.010433	0.301621
TCON	-0.388909	0.626474
ALOCUS	-0.258961	-1.450671
ASTAB	-0.644175	1.0958830
ACON	-0.017858	0.585583
MOTI	0.086618	0.585575

this variable to the discriminant function did not appreciably increase predictablity as indicated by Table 9 showing that 77.14% of cases were correctly classified. A tau error value of .542 is the same as for the nine variable equation.

Table 10 gives the coefficients for the discriminant function including Motivation II (Mot II) which is the importance of a high school diploma. Table 11 classification summary shows 81.4% correctly classified. The tau value computed is .628 indicating a 62.8% fewer errors than would be expected by random assignment and therefore increased predictability over any of the other discriminating combinations. (See Appendix B for the pooled covariance correlation matrix) This effect from adding the motivation variables also applies to research questions #5 analyzed later in this paper.

In summary for Part I, the predictive utility of dimensional characteristics:

1. The nine variable diminsional equation increased predictability over chance by 54.2%.
2. The three factor equation of most highly contributing variables increased predictability 43.6% over chance.
3. The addition of mainstreaming to the campus school as incentive-motivation (MOTI) did not increase predictability of the nine variable dimensional equation.

Table 9

Classification Summary With Mot I

Observed Outcome	Predicted Outcome Group Membership: Failure	Success	Total
Failure	45	14	59
	76.27	23.73	100.00%
Success	2	9	11N
	18.18	81.82	100.00%
Totals	47	23	70
Percent	67.14	32.86	100.00%

Cases correctly classified = 77.14%

Table 10

Classification Function Coefficients Including MOT II

(Fishers' Linear Discrimnant Functions)

Variable	Outcome Predicted	
	Failure	Success
(Constant)	-0.104726	-1.052619
SLOCUS	0.057015	0.491267
SSTAB	0.043004	-0.045969
SCON	-0.126003	0.403323
TLOCUS	-0.340439	-0.233585
TSTAB	-0.075477	0.453912
TCON	0.29904364	0.899315
ALOCUS	-0.210757	-1.548932
ASTAB	-0.594984	0.951717
ACON	-0.022288	0.581593
MOT II	0.341693	-0.832179

Table 11

Classification Summary With MOT II

Predicted Outcome Group Membership

Observed Outcome	Failure	Success	Total
Failure	47 79.66	12 20.34	59N 100.00%
Success	1 9.09	10 90.91	11N 100.00%
Totals	48	22	70
Percent	68.57	31.43	100.00%

Cases correctly classified = 81.4%

4. The addition of incentive to achieve a high school diploma (Mot II) to the original nine variables dimension function increased predictability to 62.8% over chance. While one motivation variable, the value of a high school diploma,(MOT II) did add to the predictive utility of a dimensional profile, neither it nor the motivation to return to a campus school (MOT 1) were useful predictors by themselves of academic success. The correlation between students achievement and motivation as defined for this study showed a weak negative correlation with Stuarts tau-C values of -.029 and -.035 for Motivation 1 and 2 respectively. The positive correlations expected in answer to Research Question #3 are not confirmed. Table 12 displays response frequencies to the question asked students as a measure of the importance of being mainstreamed back to their campus school. Response frequencies to the question asked as to the value of a high school diploma are shown in Table 13.

Research Question #1 is answered affirmatively with an effective discriminating combination of dimensional variables. Causes of academic achievement were perceived as more internally determined, more stable over time and more subject to volitional control for successful students than unsuccessful. This pattern of dimensional attributions held

true whether the perceiver was the student, teacher or teaching assistant.

Research Question #3 was partially confirmed. The incentive value of being mainstreamed back to campus school did not increase the accuracy of a predictive profile. However the value of achieving a high school diploma appears to be more effective motivation because its addition to the discriminating dimensional profile did increase predictability.

Section II Cross Validation of Some Earlier Attribution Research

Causal Stability and Achievement Expectancy Relationship

Weiner's theoretically predicted relationship between achievement expectancy and causal stability was not supported with the results of this study. (Research Question #2) The dimensional variables of stability, locus and controllability were compared for two outcome groups. If actual observed outcome of academic success or failure was the same as outcome expected by the student membership was in the Congruent Outcome Group. Actual observed outcome different than that expected by the student decided membership in the Incongruent Outcome Group. Students t-test performed for these groups and the stability dimension were not significant since the t-value had a probability greater than .05 (Table 14). Similarly no differences were found for the dimensions of locus and controllability and the two

Table 12

Achievement and Value of Return to Campus as Motivation (MOT I)

Achievement Outcome	Value Level				
	None	Not Sure	Probably	Yes	Totals
Failed	12.05%	8.43%	16.87%	46.99%	N=70 84.34%
Succeeded	3.61%	1.20%	2.41%	8.43%	N=13 15.66%
Totals	15.66%	9.64%	19.28%	55.42%	N=83 100%

Table 13

Achievement and Value of High School Diploma as Motivation (MOT II)

Achievement Outcome	Value Level				
	None	Not Sure	Probably	Yes	Totals
Failed	2.41%	1.20%	3.61%	77.11%	N=70 84.34%
Succeeded	0.00%	1.20%	1.20%	13.25%	N=13 15.66%
Totals	2.41%	2.41%	4.82%	90.36%	N=83 100%

Table 14

Comparison of Congruent and Incongruent Outcome Groups On

Dimensional Characteristics of Causality

Variable	Congruent Outcome X, SD	Incongruent Outcome X, SD	T-Value	P-Value
Stability	14.53 (7.44)	15.56 (6.99)	0.64	0.52
LOCUS	17.82 (6.24)	19.54 (6.48)	1.20	0.23
Controllability	19.82 (5.64)	19.06 (5.68)	-0.59	0.55

Congruent Group Achievement: expectancy = observed outcome

Incongruent Group Achievement: expectancy = observed outcome

outcome groups with $p \leq .05$. These results indicate that the congruent and incongruent outcome groups are dimensionally comparable. For this sample of subjects the cause of an academic outcome which is different than expected does not have significantly different dimensional characteristics than the cause of an outcome which is congruent with expectations. A relationship between achievement change and instability of cause hypothesize by B. Weiner's prediction cannot be confirmed with these results as expected in Research Question #2.

Actor-Observor Dimensional Differences

Analysis of variance for repeated measures revealed no significant differences in dimensional perceptions among actor (student) and observers (teacher and assistant) with $P \leq .05$ or significant interaction effects between the repeated measures of

each dimensional and achievement group membership. (Research Question #4a)

Comparison of variances for the three measures of locus (student, teacher, and assistant) yielded $F(2,136) = 2.08$, p. 0.13. Variance analyses within the stability and controllability dimension were $F(2,136) = 2.94$, p. 0.056 and $F(2, 138) = 1.15$, p. 0.32 respectively. (See Table II) These F values with probability greater than .05 cannot be accepted as evidence of significant dimensional differences in perception.

For this sample of subjects the dimensional perceptions of achievement cause are comparable for actors and observors regardless of the type of achievement outcome (success or failure).

Table I displays means and standard deviations used for the ANOVA computations. Examination of this descriptive data shows some trends both expected and unexpected by the hypothesis. The students (actors) did ascribe less internality ($\bar{X}$ - 19.30) to cause than observors (teacher $\bar{X}$ = 22.43, assistants $\bar{X}$ = 22.38) as predicted, (Research Question 4b) Contrary to prediction, actors attributed cause as more stable ($\bar{X}$ = 15.63) than did observors (teacher $\bar{X}$ = 13.70, assistants $\bar{X}$ = 14.68). (Research Question 4c)

Although no significant dimensional differences were found between actor and observors regardless of success or failure outcome, group means show a trend supporting the hypothesized interactive effect of achievement valence. The student group whose outcome was negative (failure), as predicted, did perceive cause as less personally involved (locus X = 18.56,controllability 18.77) and therefore more situationally determined than observors (locus X = 22.10 and 22.42; controllability X = 20.77 and 21.87). However, along with observors more likely attribution of cause to personal dispositions, there should be an ascription of more stability to cause than when cause is situationally or externally determined. Comparison of means do not show a trend towards

this and are contrary to expectations. Cause, even though less dispositionally viewed by unsuccessful actors, was perceived as more stable (X = 14.83) by them then by observors (X - 13.31 and 14.03).

Socio-economic Status, Students Dimensional Perceptions, and Achievement Outcome

No correlations with p. $\leq$ .05 were found for either part of Research Question 6. The correlations between each of the three dimensional perceptions of cause and median income were: locus R = .04, p. = 72, stability R = .03, p. .79 and controllability R = -.12, p. = .28. Correlational data used in this study shows no differential ascription of cause by the socieconomic status indicator of median income.

This socioeconomic indicator was also not found to be a useful predictor of student achievement (R = .1 p. = .72)

Dimensional differences by race were not investigated in this study but some descriptive statistics indicate similar success-fail rates for the racial groups. Eighty-four percent of blacks failed and 83% of whites did so. Achievement expectancy also was racially similar: 73% of blacks expected to succeed while 72.2% of whites expected the same.

Section III Dimensional characteristics of Socially Deviant High School Students

The LOCUS Dimensional Characteristic of Causality for Socially Deviant Students

Mean scores for the locus of causality indicate internality for socially deviant subjects whether perceived by actor-student or student observor (teacher & assistant) and confirms characteristics hypothesized in Research Question #7. (Table 15) Comparison of dimensional characteristics with other than socially deviant subject populations was not feasible in this study.

The range of possible dimensional values was 3-27 and values obtained represent a position on a continuum of locus of cause from external to internal, stability of cause from unstable to stable and volitional influence over cause from uncontrollable to controllable. The higher the score the more internal stable and controllable is the perception of cause. The locus mean score ($\bar{X}$=21.37) suggests cause of academic achievement is determined by internal dispositonal factors. Students attribute internality to cause ($\bar{X}$ = 19.30) as do teachers and assistants ($\bar{X}$=22.43 and $\bar{X}$=22.38). These descriptive statistics support the hypothesized finding for Research Question #7 of internality for this particular sample of a socially deviant population. The mid-continuum mean score of 14.67 on the stability dimension suggests an equivocal expectancy that causal effect on achievement can change. All three reporting groups, the student, teacher and assistant share this expectation (X 15.63, X=13.70, X = 14.68).

As in the locus dimension, high mean controllability score (X=20.95) suggests that cause is perceived by (X = 19.46) and for (X=22.06 and X=21.32) socially deviant students as under volitional control. Causes of academic achievement are perceived as internal, relatively unstable and controllable for this particular sample of a socially deviant population.

Relationship of Trust in Powerful Others and Achievement

The correlation between student achievement and trust, as defined for this study, was very weak.(Research Question #5) Stuarts tau-C values of 0.011 for student confidence in the evaluation system (Trust I) and .11 for confidence in staff administering the evaluation system (Trust II) indicate minimal power for predicting academic achievement for students in this sample. Tables 16 & 17 display response frequencies for the questions asked students as to how much trust they had in the evaluation system used by the program and staff who implement the system.

Section III

Type of Deviant Behavior and Achievement Outcome

Whether the student succeeded or failed in the program under study had no correlation with the type of behavior that warranted their inclusion in a special restrictive program. (Stuart's Tau C = -0.140) The positive

correlation predicted in Research Question #8 cannot be confirmed.

However examination of Table 18 which displays frequencies of referral cause by success or failure shows some interesting group differences which will be examined in the discussion.

Table 15

Dimensional Characteristics of Causality for Socially Deviant Students

Variable	Reporters: Student $\bar{X}$, SD	Teacher $\bar{X}$, SD	Assistant $\bar{X}$, SD	Marginal $\bar{X}$, SD
LOCUS	19.30 (5.35)	22.43 (4.22)	22.38 (3.37)	21.37 (4.33)
Stability	15.63 (6.66)	13.70 (3.89)	14.68 (3.38)	14.67 (4.81)
Controllability	19.46 (4.98)	21.32 (4.86)	22.06 (4.04)	20.95 (4.63)

* Score range of 3 -27 reflects a continuum from external to internal, unstable to stable and uncontrollable to controllable.

Table 16

Student Achievement and Trust in Evaluation System (TRUST I)

Achievement Outcome	Trust Level: None	Not Sure	Probably	Yes	Totals
Failed	24.10%	8.43%	19.28%	32.53%	N=70 84.34%
Succeeded	3.61%	2.41%	3.61%	6.02%	N=13 15.66%
Total	27.71%	10.84%	22.89%	38.55%	N=83 100%

Table 17

Student Achievement and Trust in Staff (Trust II)

Achievement Outcome	Trust Level: None	Not Sure	Probably	Yes	Totals
Failed	18.07	12.05	31.33	22.89	N=70 84.34%
Succeeded	2.41	1.20	4.82	7.23	N=13 15.66%
Totals	20.48	13.25	36.14	30.12	N=83 100%

Table 18

Referral Reason and Achievement Outcome

Student Outcome Frequency (N) Percent Row Percent Col Precent	Referral Reason Life Threatening	Gang Related	Gross Misconduct	Misconduct	Totals
Failed	15	4	42	8	69
	18.29	4.88	51.22	9.76	
	21.74	5.80	60.87	11.59	84.15
	68.18	66.67	91.30	100.00	
Succeeded	7	2	4	0	
	8.54	2.44	4.89	0.00	13
	53.85	15.38	30.77	0.00	
	31.82	33.33	8.70	0.00	15.8
Totals	22	6	46	8	
	26.83	7.32	56.10	9.76	

Chapter V

Discussion

In this study I have examined the dimensional perceptions of causality attributed by socially deviant students and their school instructors to academic achievement. The main aim was to test the utility of these causal perceptions for predicting achievement. The study also provides an opportunity to examine the reliability of a non-traditional method of collecting attributional data by comparing findings from this study's subject generated data to studies using examiner inferred data. Because this study was conducted in the field it is possible to report non-experimentally manipulated characteristics of a specific subject population.

The following discussion has been divided into three sections: predictive utility of attributional dimensions of causality; cross validation of attributional research; dimensional and other relevant variable characteristics of socially deviant students.

Predictive utility of the attributional dimensions of causality.

In this study, perceived dimensional qualities,

ascribed to the cause of academic outcome, increased predictability of outcome, over chance by 54%. These dimensional variables, by predicting with 77.14% accuracy, also discriminated more effectively than the students themselves (40.97%) teachers (71.60%) and teaching assistants (68.83%). Other plausible outcome predictors considered in this study (income level of community, educational incentive values, trust, and type of deviant behavior) had no significant correlations with academic achievement for this sample of a socially deviant student population. Despite the insignificant statistical relationship with academic outcome one of these outcome predictors did assist the effectiveness of the dimensional variable as predictors. When the correlations of value held for achieving a high school diploma were included in the discriminating dimensional function accuracy was increased to 81.4%. By correctly identifying this number of academic outcomes, predictability was 62.8% better than a chance selection. Attending to reinforcement value when predicting behavior follows on Rotter's appeal (1975, p. 59) and is particularly relevant to the subjects sampled in this study. Achievement of graduation is the main goal for any school program but students may not necessarily value this same goal. Consideration of the low success rate, which was 13 of 83 students in this sample, leads to questioning of the motivating power of a graduation incentive or academic goals

as suggested by the Willig, Harnisch, Hill, and Maehr cross-cultural study (1983). Even though addition of the assumed incentive of graduation did aid discrimination of successful and non-successful academic achievement for this sample, the fact that educational incentives (return to campus school and graduation) did not correlate significantly with academic outcome remains an interesting finding of this study. Motivational variables other than academic accomplishment appear to be operating, as Willig et al suggest. Further discussion proposes ego-defensive and enhancing needs as attributional motivators.

Although this observed superiority of an attributional profile over other plausible variables for predicting outcome is established somewhat by default, it is theoretically defensible and has an intuitive appeal, given the population sampled. Mean scores for the three dimensions of causality measured in this study (locus, stability and controllability) are 21.37, 14.67, and 20.95 respectively. These values, on the dimensional continuum, indicate cause is perceived as internal, equivocally stable and unstable, and under volitional control. By reporting cause as internal and controllable the students view outcome as due to personal factors, not situational conditions. To maintain this belief or perspective of self determination, stability of cause over time becomes a problem because both instability and stability could be counterindicative of personal control. The

attributor facilitates a belief in control by leaving all options open.

The average dimensional characteristics, describing this sample, suggest that the behavior of academic achievement, either success or failure, is explained by the perceivor as due to trait not situation characteristics. These dispositional attributions accounted for 24% of the variance in the dependant variable of academic achievement, which is considerably more than the 10% commonly found. (Mischel, 1968) The effectiveness of these personality variables for predicting behavior is probably enhanced by the fact that all subjects in this study (actors and observors) had the opportunity to base their judgment on multiple and cross-situation observations (Bem and Allen, 1974). In most experimentally manipulated studies, subjects have no knowledge of past behavior history and infer from an isolated incident. Students in this present study share common characteristics by definition of being labeled as severely behavior disordered, such as situationally pervasive opposition to authority, and this is known by their observors. This situational non-specificity increases the probability that behavior and dispositional (trait) measures will be correlated (Snyder and Tanke, 1976) because behavior is not situation dependent. Even though the characteristics of attribution reported by subjects in this study, are more person than situation oriented, the variance in behavior, for

which the attributions account, is probably somewhat constrained by the situation in which they are reported. Mischel (1977) discusses individual differences and research by Price and Boufford (1974) indicated there are settings of considerable situational constraint which naturally limit a variety of behaviors, for instance, 'in church' or 'at a job interview'. These behavioral expectations control individual differences in the interpretation of stimulus meaning and, as a consequence, variance in behavior due to these individual differences. Any school setting would be considered a 'constraining situation' by virtue of the fact that certain behaviors are inappropriate. The school setting used in this study is particularly constraining, because of the elaborate specification and evaluation of acceptable/unacceptable behavior.

The reliability of the dimensional variables for discriminating outcome did not depend on the type of outcome since 76% of failures and 82% of successes were correctly identified. Mean dimensional scores for the failure outcome group consistently reflect less internal, less stable and less controllable ascriptions than for the success group. This could mean that the failure student's behavior is more dependant on situational factors but the difference in ascriptions could also be an artifact of the instrument used for measurement. Rators of the scale (Teachers and assistants) used may have exercised a bias and thereby

indicated a high dimensional value simply because the subject was viewed favorably that is, likeable or popular. This possibility of rator bias is supported by the difference in mean dimensional scores for actual outcome groups and the predicted outcome groups. Over all, those students who actually failed were reported as less internal, less stable and less controllably determined. However, those students whose predicted outcome was incongruent with actual outcome, that is, were expected to succeed but actually did not or vis-a-versa, had higher locus, stability and controllability scores. Because fourteen of the sixteen students whose outcome was different from that predicted, had failure outcomes, the dimensional characteristics of this misidentified subgroup accounts for the mean differences, in comparison with the correctly identified students. These fourteen false-positive predictions, expected to succeed by subjects in this study, were rated at the higher end of the dimensional scale.

Cross Validation of Attributional Research Findings.

Causal stability-achievement expectancy relationship.

Weiner postulated that the probability of achievement change depended on the perception of cause as unchanging over time. This belief in the stability of causal reason for achievement, or lack of achievement, creates an expectancy for future events. The results of this study did not confirm Weiner's position. The congruency of a students expectation

of achievement with actual achievement had no significant relationship with subject reported perception of causal stability. Actually, the reason for success or failure was perceived as somewhat more stable by those subjects whose actual achievement outcome was different than the one expected, which is directly contrary to Weiner's predicted relationship. Comparison of means and standard deviations for each of the three dimensions, stability, locus and controllability, however, does suggest a trend towards the hypothesized stability-achievement change expectancy. The stability mean score for the group whose outcome was different than expected is mid-range, unlike the locus and controllability mean scores which are upper-range and have smaller standard deviations, suggesting more homogeneity. Subjects were not as consistent in perception of stability as they were of locus and controllability, which were more decisively perceived as internal and controllable. However, locus and controllability did not emerge as significant indicators of achievement change either.

This demonstrated equivocal perception of causal stability is understandable given the population and conditions. The resistence of delinquent subjects to behavior change has been explained as the consequence of an ego supportive need to control. Internal and controllable perceptions of cause, measured in this sample of a delinquent population, support a need to control explanation. However,

this sample is reporting in a situation where their achievement is specifically defined, and awarded by external evaluation. While the students express confidence in controlling their fate, with internal and controllable perceptions, they hedge their bet on outcome. By not going all the way out on a predictive limb, unexpected outcomes can be explained either dispositionally or situationally, depending on which best serves an ego-protective function. This conservative view of causal stability preserves an optimism of control (Bains, 1983)

Rating on the stability index may also have been influenced by an instrument factor which would confound the implications of this dimensional value. One stimulus question for stability of cause in Russel's Causal Dimension Scale, asks to rank cause as "can be changed-cannot be changed." Use of the word "be" requires an answer that considers, not if cause changes, but, if it is manipulable which is really a controllable dimension. This particular question may have served as a stimulus for perceptions of controllability rather than stability.

Actor-observer dimensional differences

The absence of significant dimensional differences between actors and observors in this study suggests students and instructional staff have non-divergent perspectives. Kelley and Michela (1980) point out in their review of attribution research, that most experimental studies confirm

Jones and Nisbett's divergent hypothesis, but Farr and Anderson (1983) propose that particular methods of study fail to account for the dynamics of interpersonal relations, whereby social exchange functions as a vehicle for convergence of perspectives. Staff-student interaction, in the high school program sampled for the study, is a major factor because of its relatively small size, type of student, and active intervention policy. Therapeutic and management techniques are often designed to influence student's perspective while staff training and supervision focuses on student characteristics. Weekly treatment team reviews as well as individual reviews with each student function to share information. In addition to this formal updating of current information, some participants have had relationships outside of school so have a background of interaction and are aware of historical information. These factors increase the probability of actors and observors perceptions being based on the same information and thereby sharing perspectives.

Due to the relatively high student-staff ratio (3.1-1) and exhibition of behaviors that demand interaction, highly personal relationships between staff and students often develop. This condition lays the ground for an emphathic set towards interpersonal perceptions which is heightened by shared socio-cultural factors. Over half (56%) of the observors are Black and live in the community with 76% of the student subjects. Not only are these students and

staff likely to have a chronology of interaction, they are likely to have shared many cultural experiences and mutual group membership influences their perception of each other (Duncan, 1976).

Actor's (student) attributions account for the convergence of perspectives here, because observors ascribed dispositionally as expected according to the divergent hypothesis, but actors did not ascribe situationally. This unexpected finding could be an effect of behavior intervention methods used in the program studied. Deliberate effort is made towards encouraging the student to accept responsibility for behavior, verdically identify cause and effect relationships, aid in the development of alternatives behaviors, and create conditions that support the student in delaying impulse while choosing an adaptive action. This effort directs the students to view self as object rather than subject and moves their perspective to a similar view as the observor, that is, dispositionally. Earlier in this discussion, I proposed an explanation of the tendency for these student subjects to view cause as dispositionally influenced which serves the maintenance of belief in personal control. Under conditions where this defensive strategy is operational, situational ascriptions to cause would have to be discounted in deference to dispositional characteristics and, consequently, actor-observor ascriptions converge. All in all, the context within which actor-observor perspectives

were studied appears to be a critical factor.

Socio-Cultural differences

The socio-cultural independent variable used in this study was median income of student residential community. This variable was not useful for predicting student achievement outcome of success or failure. Dimensional characteristics of cause also were not ascribed differentially by community of residence. Although students in this study came from communities of varying affluence ($13,445-$29,214 median income range) their perceptions of cause were dimensionally similar and had the same success/fail rate. Apparently overriding the implications of economic differences is a commonality of experience. All students in this study have a history of societal conflict with concomittant negative consequences. This mutually shared experience could account for the similarity of perspective.

While the interest of this study was focused on socially deviant students regardless of race, the fact that 76% of the sample is Black allows some cautious racial inference. Some earlier research cites findings that describe Blacks as not making effort attributions which would have internal, unstable, and controllable dimensions (Friend, Neale, 1972). The present study, by yielding internal, relatively unstable, and controllable dimensional ascriptions, cannot confirm Friend and Neale's conclusion.

The bias of Black children to locate cause externally (Friend and Neale, 1972; Murray and Mednick, 1975) also cannot be confirmed. The 1977 finding of Banks, Stitt, Curtis and McQuater, that Black subjects do not value academic achievement as an accomplishment, appears to be confirmed in this study: the value of a high school diploma has no correlation with academic outcome. The above cited research disconfirmations and confirmations may be confounded by the social deviance population determinant used in this study. Race did not differentiate the expectancy of success or actual outcome. Almost the exact same percentage of Black students expected to succeed as whites and actually failed, or succeeded, as whites.

Characteristics of Socially Deviant Students

The profile describing socially deviant students' perceptions of cause for their academic success or failure, obtained at this study, places responsibility with the actor person. And this is so regardless of the type of academic outcome. However, if the outcome was negative (failure) a trend towards situational responsibility is noticed. The well known hedonic bias of protection from pain appears to be operating for the failure student. The general profile of internality, equivocal stability, and controllability of cause was discussed earlier as serving defensive and adaptive functions for this particular type of student. Causal search appears to be guided by need heuristics such as belief in

personal power, predictability, and maintenance of hope. The dimensional mid-continuum placement of stability as neither stable or unstable is particularly interesting since one would think the long history of failure, typical of these students, would influence an expectation of unchanging cause and effect relationship. In actuality, however, many more subjects predicted success despite previous failure history, than actually succeeded. If these students have "learned helplessness" they are not reflecting this in their expressed attitude towards cause. Rather, they appear to be maintaining an optimisim by reserving responsibility internally and subject to control while cautiously protecting themselves from disappointment by not counting their chickens before hatching.

Considering that this sample of delinquent students showed no correlation between the academic accomplishment and the value attached to these accomplishments suggests there factors have little worth as incentives. If this is the case, these students may not be motivated to do a causal search. Because these particular events (academic outcomes) are not valued accomplishments they are of little importance for self-evaluative feedback so there is not reason to examine cause. From this study, spontaneous search cannot be inferred because subjects were asked to examine cause. Although these students may not be greatly interested in asking why they academically failed or succeeded, when they

do engage in this process, the reliability of results appears dependent on conditions. For this study, subjects independently predicted the outcome for which each subject examined cause and this choice did not have to be publically defended. Within these conditions of choice and privacy, subjects viewed cause as more affected by characteristic of themselves than the situation. However, during the ordinary experience of a day with this type of student, if a student's behavior is confronted and controlled, one hears an entirely different description of cause. This student disowns responsibility and control while claiming this unfairness to be unchanging. By externalizing responsibility that is not likely to change, cause is situationally determined. For the enhancement of personal identity negative acts need to be publicly disowned (Zuckerman, 1979; Arkin, Appleman, & Burger, 1980) and this challenged student appears to be doing just that.

This same perception of responsibility when under attack usually comes in the form of an attack on the fairness of evaluator or evaluating system. The negative behavior is only so because of evaluation prejudice. This logic leaves the determination of outcome solely with an unobjective evaluator. In this reasoning situation, trust would have a direct relationship with success because the less successful you are means the less evaluators can be trusted. However for this sample of students the expected positive correlation

was not found. Trust and outcome had no significant correlation and is understandable, given the preferred attributional profile, when not under attack. By dispositionally ascribing cause, situational conditions are discounted as influencing outcome. The student subject's reasoning is, "Since I view behavior as essentially determined by my own traits, whether or not an external evaluation can be trusted is irrelevant."

Another condition that may have influenced the subjects perceptions of cause is the emphasis placed on effort in the program. Persistence is encouraged and rewarded so is valued by both students and staff as a cause of behavior. Now, effort is an internal, unstable, and controllable cause which is the same combination of perceptions reported in this study. According to Dweck (1986) effort ascriptions can be manipulated and effectively work as motivational factors.

Students were categorized by type of deviant behavior that percipitated referral to the special program and correlations with academic outcome were examined. This examination was done out of curiosity and yielded an interesting result for further study. No significant correlations were found with outcome but chronicity and severity appear to be discriminating variables. Students counted in the Life Threatening or Gang-related categories were more likely to have been referred for the severity of

behavior rather than chronicity while the reverse would be true of students referred for Gross Misconduct or Misconduct. Academic success percentages for the two referrals determined by severity of behavior were 31.8 and 33.3% where the chronicity related categories had only 8.7 and 0%. A comparison study of attributional perspectives would be interesting for these groups that is, "chronic" versus "serious" offenders.

The utility of dimensional characteristics attributed to the cause of academic outcome by students and staff for predicting achievement outcome was investigated in a non-experimentally manipulated study. Discriminant Analysis of the Locus, Stability, and Controllability dimension correctly identified achievement outcome for 77.14% of the subjects. No significant correlations were found between achievement outcome and two motivation measures, two trust measures, socio-economic status or type of deviant behavior. However, the addition of one motivation indicator, value of a high school diploma, to the discriminant function increased percent of cases correctly identified to 81.4.

Responses to the Causal Dimension Scale indicate this sample of socially deviant high school students perceive the cause of academic achievement outcome as internally located, equivocally stable and under volitional control. These results confirmed predicted internal locus, but did not support Weiner's causal stability and achievement expectancy

relationship. Actor (student) and observer (staff) dimensional differences were not significant and this convergence of perspectives is attributed to shared background experiences, empathy, ego defensive or protective needs and intervention strategies provided by the treatment program.

Perception of causal attributions appear to be viable discriminating variables for academic prediction, curriculum, and therapeutic-intervention. The field study, method used for investigation is proposed as a valuable supplement to experimental contributions.

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APPENDIX A

APPENDIX A

Beginning of Semester Student Survey

There are 4 different things to do with this survey.

1. Be sure your name, level, and date are completed.

2. Read the two end of semester outcomes and pick the ONE that you think describes what will be your real outcome in January, 1987. Circle the one you pick.

End of Semester Outcome

A. It is January and you have been successful. The EEP review team has recommended level advancement or return to the campus school.

B. It is January and you have not been successful. The EEP review team has not recommended level advancement or return to campus school.

3. In the space where it says REASON(S) write why you think outcome A or B (Whichever you have picked) will happen. In other words, these are the causes of your outcome.

REASONS(S)

4. Read through the Causal Dimension Scale while your instructor explains the scale. Then follow the instructions at the beginning of the scale.

The Causal Dimension Scale

Instructions: Think about the reason or reasons you have written on Page 1. The items below concern your impressions or opinions of this cause or causes of your outcome. Circle ONE NUMBER for each of the following sclaes.

1.	Is the cause(s) something: about yourself	9 8 7 6 5 4 3 2 1	Something about the situation
2.	Is the cause(s): Controllable by you or other people	9 8 7 6 5 4 3 2 1	Uncontrollable by you or other people
3.	Is the cause(s) something that: Will always be	9 8 7 6 5 4 3 2 1	Us just for now
4.	Is the cause (s) something: Intended by you or other people	9 8 7 6 5 4 3 2 1	Unintended by you or other people
5.	Us the cause(s) something that is: Outside of you	1 2 3 4 5 6 7 8 9	Inside of you
6.	Is the cause(s) something that is: Different at times	1 2 3 4 5 6 7 8 9	Always the same
7.	Is the cause(s): Something about you	9 8 7 6 5 4 3 2 1	Something about others
8.	Is the cause(s) something that: Can be changed	1 2 3 4 5 6 7 8 9	Cannot be changed
9.	Is the cause(s) something for which: No one is responsible	1 2 3 4 5 6 7 8 9	Someone is responsible

Be sure your name is one this paper so you get credit for this assignment and hand it into your teacher.

Please respond to these questions by putting a circle around ONE answer.

1. Do you think the "points per class and levels" is a fair way of deciding whether you are a successful student?

   NO I don't think so. It probably is. YES it is.

2. Do you think the staff will be fair in deciding your points and levels?

   NO I don't think so. Probably will. YES

3. How important to you is returning to campus school?

   NOT At All Not Sure Somewhat Important Very Important

4. How important to you is a high school diploma?

   Not at all Not sure Somewhat Important Very Important

APPENDIX B

APPENDIX B

POOLED COVARIANCE CORRELATION MATRIX FOR DISCRIMINANT ANALYSIS

Variable	SLOCUS	SSTAB	SCON	TLOCUS	TSTAB	TCON	ALOCUS	ASTAB	ACON	MOT1	MOT2
1. SLOCUS	1.000000 0.0000	0.415200 0.0004	0.467852 0.0000	0.046076 0.7070	0.210344 0.0828	0.060103 0.6237	0.174845 0.1507	0.114637 0.3483	0.084466 0.4902	-0.015653 0.8994	0.068702 0.5749
2. SSTAB		1.000000 0.0000	0.333042 0.0052	0.011966 0.9223	0.211809 0.0806	0.034400 0.4905	-0.019394 0.8743	0.040768 0.7394	0.113240 0.3562	-0.091563 0.4564	-0.239569 0.0674
3. SCON			1.000000 0.0000	-0.173014 0.1551	0.209517 0.0840	-0.040325 0.7422	0.211693 0.0808	0.117913 0.3346	0.122035 0.3178	0.044957 0.7133	-0.031004 0.8003
4. TLOCUS				1.000000 0.0000	-0.023089 0.8506	0.848769 0.0001	-0.176655 0.1465	0.096994 0.4279	-0.122614 0.3155	0.145316 0.2335	0.191651 0.1147
5. TSTAB					1.000000 0.0000	0.005667 0.9631	-0.016534 0.8927	0.124203 0.3092	-0.022677 0.8533	0.065162 0.5948	0.253754 0.0354
6. TCON						1.000000 0.0000	-0.087513 0.4746	0.197892 0.1031	-0.020791 0.8654	0.001652 0.9892	0.173513 0.1539
7. ALOCUS							1.000000 0.0000	0.193489 0.1021	0.429118 0.0002	-0.051606 0.6737	-0.114753 0.3478
8. ASTAB								1.000000 0.0000	-0.122424 0.3163	0.077334 0.5274	-0.019206 0.8756
9. ACON									1.000000 0.0000	0.021556 0.8904	-0.029059 0.8390
10. MOT1										1.000000 0.0000	1.000000 0.0000
11. MOT2											

NOTE: MOT 1 and MOT 2 were entered separately and not correlated with each other.

APPROVAL SHEET

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The final copies have been examined by the director of the dissertaion and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertaion is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April 17, 1988
Date

Joy Rogers
Director's Signature